## DOCUMENT 2.7.

## THE WMO SAHEL AGRHYMET PROGRAMME

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Hydrologist WMO - Sahel Agrhymet Programme Niamey, NIGER 01. The CILSS/UNDP/WMO AGRHYMET programme will establish a telecommunication system for data acquisition from more than 100 hydrological and agrometeorological stations distributed throughout the Sahel zone of West Africa. The system will be based upon daily SSB(1) Radio reports to the eight national centres of the CILSS(2) countries, and will extend to the mini-computer verification of reported data and their onward transmission to the AGRHYMET Centre, Niamey, using existing GTS(3) links in the region. Following computer interpretation and evaluation on a regional basis or on the basis of hydrological basins, information statements will be prepared for same-day transmission by the GTS links back to the national centres, for direct dissemination to primary users and for general dissemination by radio broadcast.

02. The adoption of a traditional telecommunication system relates partly to the technology available at the date of formulation of the programme, partly to the comparatively higher costs of establishing automatic transmitting stations, and generally to the volume of data to be transmitted, particularly of agrometeorological and pedological data.

Problems associated with operation of such a traditional system are well understood, and it is expected that by the provision of adequate training both at the AGRHYMET Centre and at the factory level of personnel who will be responsible for the maintenance and repair of the equipment, by the establishment of repair shops at the national centres which will be supported by extensive workshop/replacement-part facilities at the AGRHYMET Centre, and by close management by the concerned national services, the system will operate effectively and consistantly.

03. This on-going system for data acquisition, analysis and interpretation, and for quasi-real time transmission of hydrological and agrometeorological information to the participating countries, is evidently susceptible to adaptation in the future taking account of developing technology, including the transmission of data by satellite, as this becomes available and viable in the technical and financial aspects.



<sup>(1)</sup> SSB : Single Side Band (équivalent à BLU : Bande Latérale Unique).

<sup>(2)</sup> CILSS : Comité International de Lutte contre la Sécheresse dans le Sahel.

<sup>(3)</sup> GTS : Global Telecommunication System.